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| APPLICATION NO. | F | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|-------------------------|------|-------------|-------------------------|---------------------|------------------|--|
| 10/789,088 | | 02/27/2004 | Masayuki Tamai | NY-KIT-367-US | 7537 | |
| 24972 | 7590 | 08/09/2005 | | EXAMINER | | |
| FULBRIGH | | WORSKI, LLP | CHOI, JACOB Y | | | |
| NEW YORK, NY 10103-3198 | | | | ART UNIT | PAPER NUMBER | |
| | | | | 2875 | · | |
| | | | DATE MAILED: 08/09/2005 | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | | |
|---|--|--|--|--|--|--|--|
| Office Action Comment | 10/789,088 | TAMAI ET AL. | | | | | |
| Office Action Summary | Examiner | Art Unit | | | | | |
| | Jacob Y. Choi | 2875 | | | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | correspondence address | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE | nely filed rs will be considered timely. I the mailing date of this communication. ID (35 U.S.C. § 133). | | | | | |
| Status | | | | | | | |
| 1) Responsive to communication(s) filed on 14 Ju | <u>une 2004</u> . | | | | | | |
| 2a) ☐ This action is FINAL . 2b) ☑ This | action is non-final. | | | | | | |
| 3) Since this application is in condition for allowar | nce except for formal matters, pro | osecution as to the merits is | | | | | |
| closed in accordance with the practice under E | Ex parte Quayle, 1935 C.D. 11, 4 | 53 O.G. 213. | | | | | |
| Disposition of Claims | | | | | | | |
| 4) Claim(s) <u>1-6</u> is/are pending in the application. | | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | | |
| 6)⊠ Claim(s) <u>1-6</u> is/are rejected. | 6) Claim(s) 1-6 is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | • | | | | | | |
| 8) Claim(s) are subject to restriction and/o | r election requirement. | | | | | | |
| Application Papers | | . • | | | | | |
| 9) The specification is objected to by the Examine | r. | • | | | | | |
| 10)⊠ The drawing(s) filed on <u>14 June 2004</u> is/are: a) accepted or b)⊠ objected to by the Examiner. | | | | | | | |
| Applicant may not request that any objection to the | drawing(s) be held in abeyance. Se | e 37 CFR 1.85(a). | | | | | |
| Replacement drawing sheet(s) including the correct | ion is required if the drawing(s) is ob | ejected to. See 37 CFR 1.121(d). | | | | | |
| 11) ☐ The oath or declaration is objected to by the Ex | caminer. Note the attached Office | e Action or form PTO-152. | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | | |
| 12)⊠ Acknowledgment is made of a claim for foreign a)⊠ All b)□ Some * c)□ None of: | priority under 35 U.S.C. § 119(a |)-(d) or (f). | | | | | |
| Certified copies of the priority document | s have been received. | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | | |
| | | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | |
| | | | | | | | |
| Attachment(s) | | | | | | | |
| 1) Notice of References Cited (PTO-892) | 4) Interview Summary | | | | | | |
| Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>14 June 2004</u>. | Paper No(s)/Mail D 5) Notice of Informal F 6) Other: | Patent Application (PTO-152) | | | | | |
| | | | | | | | |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 6/14/2004 was considered by the examiner.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the frame member must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New

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Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

4. Claim 1 is objected to because of the following informalities: phrase "an object to be illuminated; a and a bonding ..." should be correct in lines 9-10. Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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6. Claims 1, 2, 4, and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Chen (USPN 5,119,174).

Regarding claim 1, Chen discloses a printed circuit board (12), a wiring land (Figure 1) formed on the printed circuit board, a light-emitting diode (LED) element surface-mounted on the printed circuit board (12), a reflector (14) mounted on the printed circuit board (12) between the LED element and the wiring land (Figure 1) for directing a beam (24) emitted form the LED element toward an object to be illuminated, and a bonding wire (16) connecting between the LED element and the wiring land (Figure 2-3).

Note: claims in a pending application should be given their broadest reasonable interpretation. *In re Pearson*, 181 USPQ 641 (CCPA 1974).

Regarding claim 2, Chen discloses the bonding wire (16) is laid to leap over the reflector (Figures 2-3).

Regarding claim 4, Chen disclose a frame member (21, 22) connected with and supporting the reflector (14), wherein the frame member (21, 22) together with the reflector connected thereto is surface-mounted on the printed circuit board (12), and the wiring land (Figure 1) is laid at an area between the reflector (14) and the frame member (21, 22).

Regarding claim 5, Chen discloses the light source unit includes a plurality of the LED elements arranged in the form of an array to form an LED array.

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7. Claims 1-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Sugimoto et al. (USPN 6,874,910).

Regarding claim 1, Sugimoto discloses a printed circuit board (e.g., 91), a wiring land (e.g., 915) formed on the printed circuit board, a light-emitting diode (e.g., 92) element surface-mounted on the printed circuit board, a reflector (e.g., 912) mounted on the printed circuit board between the LED element and the wiring land for directing a beam (e.g., 931; Figure 25) emitted form the LED element toward an object to be illuminated, and a bonding wire (e.g., 95) connecting between the LED element and the wiring land.

Note: claims in a pending application should be given their broadest reasonable interpretation. *In re Pearson*, 181 USPQ 641 (CCPA 1974).

Regarding claim 2, Sugimoto discloses the bonding wire is laid to leap over the reflector (e.g., Figures 24 & 25).

Regarding claim 3, Sugimoto discloses the reflector includes a relay land formed on a top face (e.g., 915; Figures 24 & 25) thereof and the bonding wire (e.g., 95) is laid via the relay land.

Regarding claim 4, Sugimoto discloses a frame member (e.g., 913) connected with and supporting the reflector, wherein the frame member together with the reflector connected thereto is surface-mounted on the printed circuit board, and the wiring land is laid at an area between the reflector and the frame member.

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Regarding claim 5, Sugimoto discloses the light source unit includes a plurality of the LED elements arranged in the form of an array to form an LED array.

Claim Rejections - 35 USC § 103

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugimoto et al. (USPN 6,874,910).

Regarding claim 6, Sugimoto discloses the light source unit includes a plurality of the LED arrays for red, blue and green colors.

However, Sugimoto failed to mention the arrays of LED(s) are utilized for a color film scanner.

It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Chen (USPN 5,226,723) – light emitting diode display

Fjelstad (USPN 6,583,444) – semiconductor packages having light-sensitive chips

Koay et al. (US 2002/0047130) - light source

Ng (US 2002/0021085) – light emitting devices

Arndt et al. (USPN 6,459,130) – optoelectronic semiconductor component

Suenaga (US 2004/0120155) - light emitting apparatus

Hashimoto et al. (US 2004/0065894) - light emitting device using LED

Fjelstad (US 2003/0136968) – semiconductor package having light sensitive chips

Yang et al. (USPN 6,921,183) – concave cup printed circuit board for light emitting diode and method for producing the same

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob Y. Choi whose telephone number is (571) 272-2367. The examiner can normally be reached on Monday-Friday (10:00-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JC

JOHN ANTHONY WARD PRIMARY EXAMINER